

SUPPLEMENT TO SERIES 800 USER MANUAL

HARD DISK INSTALLATION

1.0 INTRODUCTION

The installation of a Hard Disk to a Series 800 computer requires various installation programs that are contained on a special installation diskette supplied with the system.

These special programs must be run so that the Series 800 will recognize the Hard Disk as part of its total system.

2.0 HARD DISK SIZES

There are three (3) sizes of Hard Disk that may be attached to the Series 800 are 5 Megabyte, 10 Megabyte and 20 Megabyte.

3.0 DRIVE LOGICAL DESIGNATION

When the system recognizes that it has a Hard Disk attached, it performs a logical designation which includes the 5 1/4 floppy(s), Hard Disk and any 8" floppy disk that may be attached external to the system.

When the Hard Disk is installed, the system partitions the disk into 5 Megabyte partitions and then handles these partitions as individual 5 Megabyte drives. (i.e. A 20 Megabyte Hard Disk will be handled as three (3) individual drives, each with its own logical designation)

NOTE

To install the new system, a floppy diskette must be utilized. However, after the system is installed, it will not be necessary to use the 5 1/4" floppy drive again; therefore, when the system designates logical drives, it places the 5 1/4" floppy at the end of the string of logical designations.

When a Hard Disk is installed in the system, the drives are logically designated in the following manner:

System with one 5 1/4" floppy and one 5 Megabyte Hard Disk:

Hard Disk = Drive A

System with one 5 1/4" floppy and one 10 megabyte Hard Disk:

Hard Disk = Drives A and B
5 1/4" Floppy = Drive C

System with one 5 1/4" floppy and one 20 Megabyte Hard Disk:

Hard Disk = Drives A, B and C
5 1/4" Floppy = Drive D

System with one 5 1/4" floppy, one 20 Megabyte drive and two 8" floppy drives:

Hard Disk = Drives A, B and C
5 1/4 Floppy = Drive D
8" Floppys = Drives E and F

NOTE

The above drive designations occur upon execution of the IPL program and remain as such until a SYSTEM RESET is executed.

4.0 HARD DISK PROGRAM INSTALLATION

There are three (3) support programs contained on the system diskette which are UNI-FMT, UNI-TOOL and IPL+XXXX.

These programs allow the user to configure the hardware characteristics; to tell the system the number heads and cylinders of the drive used; and if the system is running in either ECC or CRC mode.

UNI-FMT

The UNI-FMT program formats the Hard Disk by placing E5 (Hex) on every track to insure a good surface. It also initializes the Directory on drive A. If you have a 10 or 20 Megabyte Hard Disk, partitions B or B and C will not be initialized.

This program also allows you to select if the data will be written utilizing either the ECC or CRC mode.

At this point, you must now perform either a GEN 52 or GEN 56. The purpose of these programs is to allow you to do a WARM BOOT from the hard disk.

NOTE

These routines are used the same as SYSMAC for a 52K system and SYSGEN for a 56K system.

UNI-T00L

This program is necessary in order to transfer data from memory to Hard Disk and from Hard Disk back to memory again in 256 logical sector bytes. The UNI-T00L program also allows the user to copy the CP/M operating system onto the Hard Disk.

IPL+XXXX

This program allows the user to "link" the Series 800 to the Hard Disk and to initialize the remaining portion of the disk.

```
+ = ECC SET      PORT SELECTION FOR HARD DISK
      :           :
      :           :
      : :-----:
      : :       :
      : :-----:
      :ECC:0:1:2:3:
      :-----:
      :IPL: + :6:X:X:X:
      :-----:
      :
      :
      : _____ INDICATES NUMBER OF HEADS
```

NOTE

When shipped from the factory, IPLXXXX will be renamed IPL56+XX or IPL52+XX appropriately and the system GEN56 or GEN52 must match. The XX indicates the size hard disk installed in the system.

ERA B:*. * and ERA C:*. *

This program must be run at this point in order to clear all Directory entries on logical Drives B and C.

The reason this program must be run is that there may be garbage out on the Directory tracks of the disk.

PROCEDURE:

- Load Operating System into drive A -- BOOT up the system.
- Type in UNI-FMT -- depress RETURN.
- The following message will appear on the screen:

Datamac Format/Verify Program for CP/M

Available Drives are:

0 = 153 cylinders x 4 heads
2 = 306 cylinders x 2 heads
4 = 306 cylinders x 4 heads
6 = 306 cylinders x 6 heads
X = Exit to CP/M

Enter Choice -->

- Upon Choice selection, the following message will appear:

Ecc or Crc Data Format

1 = Ecc
2 = Crc
X = Exit to CP/M

Select:

- Upon selection, the following message will appear on the screen:

A - Format and Verify
B - Verify Only
C - Exit to Cpm

Select (A - C) ?

- Upon selection of either A or B, the following will appear on the screen:

Verifying drive: 0

Current track = X

- At the completion of formatting, you must either GEN 56K or GEN 52K. Type in the appropriate memory size:

GEN 52K -- depress RETURN

The following message will appear:

SYSMAC VER 2.0
SOURCE DRIVE NAME (OR RETURN TO SKIP)

- Type in A.

The following message will appear:

SOURCE ON A, THEN TYPE RETURN

- Depress RETURN.

The following message will appear:

DESTINATION DRIVE NAME (OR RETURN TO REBOOT)

- Depress RETURN

- Type in UNI-TOOL. The following message will appear on the screen:

Rev MM-DD-YY

Universal Hard Disk Tool

Select Drive Type:

0 = 153 cylinder x 4 heads
2 = 306 cylinder x 2 heads
4 = 306 cylinder x 4 heads
6 = 306 cylinder x 6 heads

Enter Choice -->

- Type in the appropriate number that corresponds with the type of hard disk installed. The following message will appear on the screen:

Select Ecc or Crc:

1 = Ecc
2 = Crc
X = Exit to CP/M

Enter Choice -->

The following message will appear on the screen:

U n i - T o o l s
Rd, Wrt, or Fill ?

- Type in a W. The following message will appear:

Controller Port (0 - 3) ?

- Type in a 0. The following message will appear:

Starting Hex Ram Address ?

- Type in 980 -- depress RETURN. The following message will appear:

Starting Disk Sector ?

- Type in 0 -- depress RETURN. The following message will appear:

Number of Sectors ?

- Type in 22. The following message will appear:

Rd, Wrt, or Fill ?

- Perform a System Reset then Re-boot the system. The following message will appear:

DataMac Computer Systems
Model 800 Rev-01 Ser XXXX
CP/M 2.2
CPR 1.4
MM-DD-YY

- You must now IPL the system. Type in IPL+XXXX -- depress RETURN. The following message will appear:

--- Hard-Disk Options Installed ---

Port 0 = 306 x 6 - A B C

Rev MM-DD-YY

- You must now perform the ERA *.* function to change all files to a READ/WRITE condition. Type in ERA B:*. * -- depress RETURN. The following message will appear:

NOTE

If you have a C Drive, you must perform the ERA C:*. * at the completion of the ERA B:*. * function.

ALL (Y/N)?

NOTE

This operation will take from 60 to 90 seconds to complete.

- Type in a Y -- depress RETURN. The following message will appear:

NO FILE